



Level 2 Interconnection Application for Generating Facilities Between 25kW and 100kW

The Customer-Generator applicant ("Applicant") hereby makes application to the Transmission and Distribution (T&D) Utility to install and operate a generating facility interconnected with the T&D Utility system.

An application is a Complete Application when it provides all applicable information required below. (Additional information to evaluate a request for interconnection may be required and will be so requested from the Interconnection Applicant by T&D Utility after the application is deemed complete).

Once complete, please sign and include your \$_____ application and cost sharing fee (see Section 12) and mail to the following address:

Eastern Maine Electric Cooperative
Engineering
PO Box 425
Calais, ME 04619

(Make check payable to: Eastern Maine Electric Cooperative)

1. Legal Name of Interconnecting Applicant (or, if an Individual, Individual's Name)

- a. Name: _____
- b. Company (If Applicable): _____
- c. Contact Person: _____
- d. Account Number: _____ *(Existing Account Number, if generator to be interconnected on the Customer side of a utility revenue meter.)*
- e. Address: _____
- f. City, State, Zip: _____
- g. Telephone (Day): _____
- h. Telephone (Evening): _____
- i. Fax: _____
- j. E-Mail Address: _____



2. Contact (if different from Interconnection Customer)

- a. Name: _____
- b. Account Number: _____
- c. Address: _____
- d. City, State, Zip: _____
- e. Telephone (Day): _____
- f. Telephone (Evening): _____
- g. Fax: _____
- h. E-Mail Address: _____
- i. Owner of the facility: _____

3. Installing Electrical Contractor Information

- a. Company: _____
- b. Representative: _____
- c. Title: _____
- d. Street Address: _____
- e. Mailing Address (if different from street address): _____
- f. Email: _____
- g. Phone #: _____
- h. Fax #: _____

4. Timing

- a. Requested In-Service Date: _____

5. Generating Facility Specifications

- a. Nameplate Output Power Rating: (summer) _____ kW or: _____ kVA
(winter) _____ kW or: _____ kVA
- b. Individual Generator Power Factor: Rated Power Factor: Leading _____ Lagging _____
- c. Generating Facility AC output voltage: _____ Volts
- d. Generating Facility Type:
 - 1. Single Phase _____ Three Phase _____
 - 2. Synchronous _____ Induction _____ Inverter _____ Other _____



- e. Battery Storage rating (if applicable): _____ kW, and _____ AH or kWh
 - 1. Describe operating mode on the one-line diagram
- f. Location (if different from above): _____
- g. Interconnection Customer or Customer-Site Load: _____ kW (if none, so state)
- h. Typical Reactive Load (if known): _____
- i. Maximum Physical Export Capability Requested: _____ kW
- j. Prime Mover: Photovoltaic/Reciprocating Engine/Fuel Cell/Turbine/Other (describe) _____
- k. Energy Source: Photovoltaic/Wind/Hydro/Diesel/Natural Gas/Fuel Oil/Reciprocating Engine
Other (describe) _____

l. Description of proposed installation and operation

m. List components of the Generating Facility Equipment Package that are currently certified:

Equipment Type	Certifying Entity
_____	_____
_____	_____
_____	_____
_____	_____

Is the prime mover compatible with the certified protective relay package? ____ Yes ____ No

6. Inverter-Based Generating Facilities

- a. Manufacturer: _____
- b. Model Name and No.: _____
- c. Version No.: _____
- d. Serial No.: _____
- e. Is the equipment UL1741 SB Listed? Yes / No

If YES, attach any documentation provided by the generator manufacturer describing the UL1741 SB listing for the generating facility to this application.



Max design fault contribution current:

Instantaneous or RMS?

Harmonics Characteristics:

Start-up requirements:

7. Neutral Grounding Resistor

Neutral Grounding Resistor (If Applicable): _____

8. Synchronous Generators:

Direct Axis Synchronous Reactance, X_d : _____ P.U.

Direct Axis Transient Reactance, X'_d : _____ P.U.

Direct Axis Subtransient Reactance, X''_d : _____ P.U.

Negative Sequence Reactance, X_2 : _____ P.U.

Zero Sequence Reactance, X_0 : _____ P.U.

KVA Base: _____

Field Volts: _____

Field Amperes: _____

9. Induction Generators:

Motoring Power (kW): _____

I 2t or K (Heating Time Constant): _____

Rotor Resistance, R_r : _____

Stator Resistance, R_s : _____

Stator Reactance, X_s : _____

Rotor Reactance, X_r : _____

Magnetizing Reactance, X_m : _____

Short Circuit Reactance, X_d'' : _____

Exciting Current: _____

Temperature Rise: _____

Frame Size: _____

Design Letter: _____



Reactive Power Required In Vars (No Load): _____

Reactive Power Required In Vars (Full Load): _____

Total Rotating Inertia, H: _____ Per Unit on kVA Base

10. **Excitation and Governor System Data for Synchronous Generators Only**

Provide appropriate IEEE model block diagram of excitation system, governor system and power system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be substituted.

11. **Interconnection Facilities Information**

Transformer Data (If Applicable, for Interconnection Customer- Owned Transformer):

Will a transformer be used between the generator and the Point of Common Coupling? ___Yes ___No

Will the transformer be provided by the Interconnection Customer? ___Yes ___No

Is the transformer: ___single phase ___three phase? Size: _____ kVA

Transformer Impedance: _____percent on _____kVA Base

If Three Phase:

Transformer Primary: ___Volts ___Delta ___Wye ___Wye Grounded

Transformer Secondary: ___Volts ___Delta ___Wye ___Wye Grounded

Transformer Tertiary: ___Volts ___Delta ___Wye ___Wye Grounded

Transformer Fuse Data (If Applicable, for Interconnection Customer-Owned Fuse):

(Attach copy of fuse manufacturer's Minimum Melt and Total Clearing Time-Current Curves)

Manufacturer: _____ Type: _____ Size: _____ Speed: _____

Neutral Grounding Resistor (if applicable):

Interconnecting Circuit Breaker (if applicable):

Manufacturer: _____ Type: _____

Load Rating (Amps): _____ Interrupting Rating (Amps): _____ Trip Speed (Cycles): _____



Interconnection Protective Relays (If Applicable):

Manufacturer:

Model No. _____

List of Functions and Adjustable Setpoints for the protective equipment or software:

	Set-point Function	Minimum	Maximum
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____

Current Transformer Data (If Applicable): *Enclose copy of Manufacturer Excitation and Ratio Correction Curves*

Manufacturer:

Type:

Accuracy Class:

Proposed Ratio Connection: ____

Manufacturer:

Type:

Accuracy Class:

Proposed Ratio Connection: ____

Potential Transformer Data (If Applicable):

Manufacturer:

Type:

Accuracy Class:

Proposed Ratio Connection: ____

Manufacturer:

Type:

Accuracy Class:

Proposed Ratio Connection: ____



12. Application and Cost Sharing Fee Calculation

Application Fee = \$100 + \$2 * _____ kW = \$ _____
Cost Sharing Fee = \$25 * _____ kW = \$ _____

Please use installed generating capacity not inverter capacity when calculating fees for inverter-based generating facilities.

For questions on fee's please refer to Maine Public Utilities Commission Chapter 324, Sections 3.B.2 and 12.K.

General Information Checklist

Please sign on the line beside each item listed below verifying that a complete package has been submitted and the Customer(s) are aware of all requirements:

If a 50 kW or smaller Generating Facility, enclose copy of site electrical one-line diagram showing the configuration of all Generating Facility equipment, current and potential circuits, and protection and control schemes.

If the Generating Facility is larger than 50 kW, the one-line diagram must be signed and stamped by a licensed Professional Engineer.

Is a One-Line Diagram Enclosed? ___Yes ___No

Enclose copy of any site documentation that indicates the precise physical location of the proposed Generating Facility (e.g., USGS topographic map or other diagram or documentation). ___Yes___No

Proposed location of protective interface equipment on property (include address if different from the Interconnection Customer's address)

Enclose copy of any site documentation that describes and details the operation of the protection and control schemes. ___Yes___No

Enclose copies of schematic drawings for all protection and control circuits, relay current circuits, relay potential circuits, and alarm/monitoring circuits (if applicable). Yes___No



Information Required Prior to Physical Interconnection

Installing Electrician: _____

Firm: _____

License No.: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____ Telephone: _____

Applicant Signature

I hereby certify that, to the best of my knowledge, all the information provided in the Interconnection Application is true and correct. I also agree to install a Warning Label on or near my service meter location. Generating Facility systems must be compliant with IEEE, NEC, ANSI, and UL standards, where applicable. By signing below, the Applicant also certifies that the installed generating equipment meets the appropriate preceding requirement(s) and can supply documentation that confirms compliance.

Signed: _____ Date: _____

FOR COMPANY USE ONLY

Contingent Approval to Interconnect the Generating Facility

Interconnection of the Generating Facility is approved contingent upon the proper execution of the Level 2 Interconnection Agreement and return of the Certificate of Completion (or other evidence of local code official approval), when the Generating Facility has been installed.

Company Signature: _____

Title: _____

Date: _____

Queue number: _____

Company waives inspection/witness test? Yes ____ No ____